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PDXK Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7167a

Specification

PDXK Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	O00764
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**35102**
Antigen Region	**242-272**

PDXK Antibody (C-term) - Additional Information

Gene ID 8566

Other Names
Pyridoxal kinase, Pyridoxine kinase, PDXK, C21orf124, C21orf97, PKH, PNK

Target/Specificity
This PDXK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 242-272 amino acids from the C-terminal region of human PDXK.

Dilution
WB~~1:1000
IHC-P~~1:50~100

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
PDXK Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PDXK Antibody (C-term) - Protein Information

Name PDXK (HGNC:8819)

Function Catalyzes the phosphorylation of the dietary vitamin B6 vitamers pyridoxal (PL), pyridoxine (PN) and pyridoxamine (PM) to form pyridoxal 5'-phosphate (PLP), pyridoxine

5'-phosphate (PNP) and pyridoxamine 5'-phosphate (PMP), respectively (PubMed:9099727, PubMed:10987144, PubMed:17766369, PubMed:19351586, PubMed:31187503) (Probable). PLP is the active form of vitamin B6, and acts as a cofactor for over 140 different enzymatic reactions.

Cellular Location
Cytoplasm, cytosol.

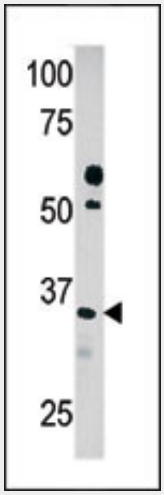
Tissue Location
Ubiquitous (PubMed:9099727, PubMed:31187503). Highly expressed in testis (PubMed:9099727)

PDXK Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

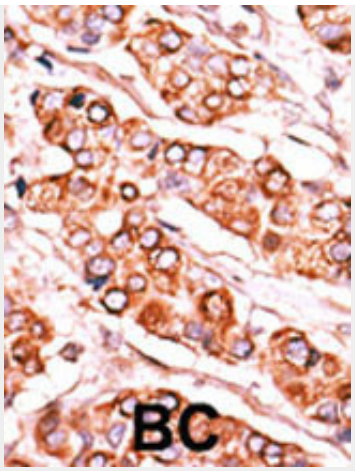
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PDXK Antibody (C-term) - Images



Western blot analysis of anti-PDXK (Cat. #AP7167a) in HepG2 cell line lysate (35ug/lane).PDXK(arrow) was detected using the purified Pab.

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Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

PDXK Antibody (C-term) - Background

Pyridoxal kinase (PDXK) converts vitamin B6 to pyridoxal-5-phosphate (PLP), an essential cofactor in the intermediate metabolism of amino acids and neurotransmitters. The PDXK gene encodes a 312-amino acid polypeptide, and expression of the cDNA reveals pyridoxal kinase activity. Northern blot analysis revealed that a major 1.5-kb PDXK transcript is expressed in all tissues tested. The expression of PDXK shows circadian oscillations. The expression of Pdxk in mouse liver and brain is regulated by the 3 PAR bZIP transcription factors, Dbp, Hlf, and Tef, which also show circadian oscillations in expression. Mice devoid of all 3 transcription factors show decreased levels of brain PLP, serotonin, and dopamine, and are highly susceptible to frequently lethal generalized spontaneous and audiogenic epilepsies.

PDXK Antibody (C-term) - References

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Lee, H.S., et al., Mol. Cells 10(4):452-459 (2000).
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Hanna, M.C., et al., J. Biol. Chem. 272(16):10756-10760 (1997).
Zhang, Z., et al., J. Nutr. 10(1):53-59 (1993).